

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/797,791	03/10/2004	Thomas Duerbaum	DE 010138A 4510		
24737 PHILIPS INTE	PHILIPS INTELLECTUAL PROPERTY & STANDARDS			EXAMINER	
P.O. BOX 3001			PATEL, RAJNIKANT B		
BRIARCLIFF	MANOR, NY 10510		ART UNIT	PAPER NUMBER	
			2838		
			MAIL DATE	DELIVERY MODE	
			12/18/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)			
SUPPLEMENTAL	10/797,791	DUERBAUM ET AL.			
Office Action Summary	Examiner	Art Unit			
	Rajnikant B. Patel	2838			
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address			
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tirr rill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE!	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).			
Status					
 1) Responsive to communication(s) filed on 19 November 2007. 2a) This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. 					
Disposition of Claims					
4) Claim(s) 5,9,11-13,16-18 and 23-33 is/are pend 4a) Of the above claim(s) is/are withdraw 5) Claim(s) is/are allowed. 6) Claim(s) 5,9,11-13,16-18 and 23-33 is/are rejection of the composition of the compos	vn from consideration. cted. r election requirement.	≣xaminer.			
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.					
Priority under 35 U.S.C. § 119					
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 					
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	nte			

10/797,791 Art Unit: 2838

DETAILED ACTION

Response to Arguments

- 1. Applicant's arguments with respect to claims 5, 11-13, 17-18, 25-26 and 31-33 have been considered but are moot in view of the new ground(s) of rejection.
- 2. Applicant's arguments filed 7 August 2007 regarding claims 9, 16, 23-24 and 28-30 have been fully considered but they are not persuasive.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

- (b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 4. Claims 9 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Liu et al. (U.S. Patent # 5,363,287).

Liu et al. disclose the claimed subject matters a resonant converter (figure 1), including a multiple output (figure 1, item –12V, +12V, +5V), a transformer with a primary winding (figure 1, item 12), and at least two secondary windings (figure 1, item T1 with three different windings) and the different winding direction and different ratio

10/797,791 Art Unit: 2838

are at the top transformer and middle transformer, since the conventional "." Represent the different winding direction (one dot at bottom of coil, the other "." at top). The different ratio of output voltage (12, -12) to number of turns (turns are same for both (n), since voltage magnitude is the same (12)) is different since one ratio positive (12/n), the other is negative (-12/n) and at least two of the secondary windings being electrically separated (figure 1).

Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claims 5 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liu et al. (U.S. Patent # 5,363,287) in combination with Raets (U.S. Patent # 5,777,859) Liu et al. disclose the claimed subject matters as explained in the previous office action (repeated here below for reference), except the utilization of the technique for an inverter in series with the capacitive element, the external inductive element and the primary winding of the transformer. Raets teaches the utilization of the similar technique for an inverter in series with the capacitive element, the external inductive element and the primary winding of the transformer (figure 1, item 6-10). It would have been obvious

Application/Control Number:

10/797,791

Art Unit: 2838

one having an ordinary skill in the art at the time the invention was made to modify Liu et al.'s converter by utilizing the technique taught by Rates. Further Liu et al. discloses the claimed subject matters except that an inverter in series with the capacitive element, the external inductive element and the primary winding of the transformer instead of inverter for, Liu et al. shows that DC-AC-DC converter equivalent is an structure known in the art, therefore, because these two topology were art-recognized equivalents at the time the invention was made, one of ordinary skill in the art would have found it obvious to substitute inverter for converter.

7. Claims 11-13, 17-18, 25-27 and 32-33 rejected under 35 U.S.C. 103(a) as being unpatentable over Liu et al. (U.S. Patent # 5,363,287) in combination with Raets (U.S. Patent # 5,777,859) and further in combination with Steigerwald et al. (U.S. Patent # 4,695,934) and Marson et al. (U.S. patent # 5,077,486).

Liu et al. in combination with Raets disclose the claimed subject matters as explained in the claims 5,9 and 31, above, except the utilization of the technique for the at least two of the secondary windings being electrically separated, the multiple outputs a measuring signal for regulating an output voltage of the inverter, the secondary windings being electrically connected one another, secondary winding connected to a ground potential and a chopped DC voltage signal to be coupled to primary windings (the similar limitation taught by Steigerwald et al. and Marson et al. as explained in the previous office action and the previous office action is repeated here below for reference), It would have been obvious one having an ordinary skill in the art at the time Liu et al. in

Application/Control Number:

10/797,791 Art Unit: 2838

combination with Raets' inverter circuit by technique taught by Steigerwald et al. and Marson et al. for the purpose of increasing the efficiency of the power supply, reducing cost and increasing reliability.

8. Claims 23-24 and 28-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liu et al. (U.S. Patent # 5,363,287) in combination with Steigerwald et al. (U.S. Patent # 4,695,934) and further in combination with Marson et al. (U.S. patent # 5,077,486).

Liu et al. disclose the claimed subject matters as explained in the claims 9 and 16, above, except the utilization of the technique for the multiple outputs a measuring signal for regulating an output voltage of the inverter, the secondary windings being electrically connected one another, secondary winding connected to a ground potential and a chopped DC voltage signal to be coupled to primary windings. Steigerwald et al. teaches the utilization of the similar technique for the multiple outputs a measuring signal for regulating an output voltage of the inverter (column 3, line 55-65) (claim 28), the secondary windings being electrically connected one another (figure 1, item 30-39) (claim 23), a secondary winding connected to a ground potential (figure 1, item 40 connected to ground potential)(claim 24) and Marson et al. teaches the utilization of the similar technique for a chopped DC voltage signal to be coupled to primary windings (column 3-4, line 1-65) (claim 29-30). It would have been obvious one having an ordinary skill in the art at the time the invention was made to modify Liu et al.'s power supply by utilizing the technique taught by Stegerwald et al. and Marson et al. for the

10/797,791

Art Unit: 2838

purpose of increasing the efficiency of the power supply and to meet cost effectiveness and reliability. In regards to claim 12, the secondary winding being electrically separated from one another (Liu et al's figure 1).

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10/797,791 Art Unit: 2838

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rajnikant B. Patel whose telephone number is 571-272-2082. The examiner can normally be reached on 6.30-5.00; m-f.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Akm Ullah can be reached on 571-272-2361. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or/574-272-1000.

Rajnikant B Patel Primary Examiner Art Unit 2838